

RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 10/538,157
Source: PCT
Date Processed by STIC: 06/22/2005

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PCT

RAW SEQUENCE LISTING DATE: 06/22/2005
PATENT APPLICATION: US/10/538,157 TIME: 10:07:45

Input Set : A:\co10227se.APP
Output Set: N:\CRF4\06222005\J538157.raw

ANT: Tobias DASSLER
OF INVENTION: METHOD FOR THE PRODUCTION OF R-ALPHA-LIPOIC ACID BY
TATION
ERENCE: Co 10227
T APPLICATION NUMBER: US/10/538,157
T FILING DATE: 2005-06-08
OF SEQ ID NOS: 4
RE: PatentIn Ver. 2.0
NO: 1
: 1017
DNA
SM: Escherichia coli
E:
KEY: CDS
DN: (1)..(1014)
ATION INFORMATION:
s: Morris, Timothy W.
Kelynne E.
Jr., John E.
Identification of the Gene Encoding Lipoate-Protein
A of Escherichia coli
L: J. Biol. Chem.
: 269
23
16091-16100
1994
CE: 1

c	ta cgc ctg ctc atc tct gac tct tac gac ccg tgg ttt	48
Leu	Arg Leu Leu Ile Ser Asp Ser Tyr Asp Pro Trp Phe	
5	10	15
gtg	gaa gag tgt att ttt cgc caa atg ccc gcc acg cag	96
Val	Glu Glu Cys Ile Phe Arg Gln Met Pro Ala Thr Gln	
20	25	30
ttt	ctc tgg cgc aat gcc gac acg gta gta att ggt cgc	144
Phe	Leu Trp Arg Asn Ala Asp Thr Val Val Ile Gly Arg	
40	45	
ccg	tgg aaa gag tgt aat acc cgg cgg atg gaa gaa gat	192
Pro	Trp Lys Glu Cys Asn Thr Arg Arg Met Glu Glu Asp	
55	60	
ctg	gcg cgg cgc agt agc ggt ggc ggc gcg gtg ttc cac	240
Leu	Ala Arg Arg Ser Ser Gly Gly Ala Val Phe His	
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59 Asp Leu Gly Asn Thr Cys Phe Thr Phe Met Ala Gly Lys Pro Glu Tyr			
60 85 90 95			
62 gat aaa act atc tcc acg tcg att gtg ctc aat gcg ctg aac gcg ctc	336		
63 Asp Lys Thr Ile Ser Thr Ser Ile Val Leu Asn Ala Leu Asn Ala Leu			
64 100 105 110			
66 ggc gtc agc gcc gaa gcg tcc gga cgt aac gat ctg gtg gtg aaa acc	384		
67 Gly Val Ser Ala Glu Ala Ser Gly Arg Asn Asp Leu Val Val Lys Thr			
68 115 120 125			
70 gtc gaa ggc gac cgc aaa gtc tca ggc tcg gcc tat cgc gaa acc aaa	432		
71 Val Glu Gly Asp Arg Lys Val Ser Gly Ser Ala Tyr Arg Glu Thr Lys			
72 130 135 140			
74 gat cgc ggc ttc cac cac ggc acc ttg cta ctc aat gcc gac ctc agc	480		
75 Asp Arg Gly Phe His His Gly Thr Leu Leu Leu Asn Ala Asp Leu Ser			
76 145 150 155 160			
78 cgc ctg gca aac tat ctc aat ccg gat aaa aag aaa ctg gcg gcg aaa	528		
79 Arg Leu Ala Asn Tyr Leu Asn Pro Asp Lys Lys Lys Leu Ala Ala Lys			
80 165 170 175			
82 ggc att acg tcg gta cgt tcc cgc gtg acc aac ctc acc gag ctg ttg	576		
83 Gly Ile Thr Ser Val Arg Ser Arg Val Thr Asn Leu Thr Glu Leu Leu			
84 180 185 190			
86 ccg ggg atc acc cat gag cag gtt tgc gag gcc ata acc gag gcc ttt	624		
87 Pro Gly Ile Thr His Glu Gln Val Cys Glu Ala Ile Thr Glu Ala Phe			
88 195 200 205			
90 ttc gcc cat tat ggc gag cgc gtg gaa gcg gaa atc atc tcc ccc aac	672		
91 Phe Ala His Tyr Gly Glu Arg Val Glu Ala Glu Ile Ile Ser Pro Asn			
92 210 215 220			
94 aaa acg cca gac ttg cca aac ttc gcc gaa acc ttt gcc cgc cag agt	720		
95 Lys Thr Pro Asp Leu Pro Asn Phe Ala Glu Thr Phe Ala Arg Gln Ser			
96 225 230 235 240			
98 agc tgg gaa tgg aac ttc ggt cag gct ccg gca ttc tcg cat ctg ctg	768		
99 Ser Trp Glu Trp Asn Phe Gly Gln Ala Pro Ala Phe Ser His Leu Leu			
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102 gat gaa cgc ttt acc tgg ggc gtc gaa ctg cat ttc gac gtt gaa	816		
103 Asp Glu Arg Phe Thr Trp Gly Gly Val Glu Leu His Phe Asp Val Glu			
104 260 265 270			
106 aaa ggc cat atc acc cgc gcc cag gtg ttt acc gac agc ctc aac ccc	864		
107 Lys Gly His Ile Thr Arg Ala Gln Val Phe Thr Asp Ser Leu Asn Pro			
108 275 280 285			
110 gcg ccg ctg gaa gcc ctc gcc gga cga ctg caa ggc tgc ctg tac cgc	912		
111 Ala Pro Leu Glu Ala Leu Ala Gly Arg Leu Gln Gly Cys Leu Tyr Arg			
112 290 295 300			
114 gca gat atg ctg caa cag gag tgc gaa gcg ctg ttg gtt gac ttc ccg	960		
115 Ala Asp Met Leu Gln Gln Glu Cys Glu Ala Leu Leu Val Asp Phe Pro			
116 305 310 315 320			
118 gaa cag gaa aaa gag cta cgg gag tta tcg gca tgg atg gcg ggg gct	1008		
119 Glu Gln Glu Lys Glu Leu Arg Glu Leu Ser Ala Trp Met Ala Gly Ala			
120 325 330 335			
122 gta agg tag	1017		
123 Val Arg			

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126 <210> SEQ ID NO: 2
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128 <212> TYPE: PRT
129 <213> ORGANISM: Escherichia coli
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135 Asn Leu Ala Val Glu Glu Cys Ile Phe Arg Gln Met Pro Ala Thr Gln
136   20          25          30
138 Arg Val Leu Phe Leu Trp Arg Asn Ala Asp Thr Val Val Ile Gly Arg
139   35          40          45
141 Ala Gln Asn Pro Trp Lys Glu Cys Asn Thr Arg Arg Met Glu Glu Asp
142   50          55          60
144 Asn Val Arg Leu Ala Arg Arg Ser Ser Gly Gly Gly Ala Val Phe His
145   65          70          75          80
147 Asp Leu Gly Asn Thr Cys Phe Thr Phe Met Ala Gly Lys Pro Glu Tyr
148   85          90          95
150 Asp Lys Thr Ile Ser Thr Ser Ile Val Leu Asn Ala Leu Asn Ala Leu
151   100         105         110
153 Gly Val Ser Ala Glu Ala Ser Gly Arg Asn Asp Leu Val Val Lys Thr
154   115         120         125
156 Val Glu Gly Asp Arg Lys Val Ser Gly Ser Ala Tyr Arg Glu Thr Lys
157   130         135         140
159 Asp Arg Gly Phe His His Gly Thr Leu Leu Asn Ala Asp Leu Ser
160 145         150         155         160
162 Arg Leu Ala Asn Tyr Leu Asn Pro Asp Lys Lys Lys Leu Ala Ala Lys
163   165         170         175
165 Gly Ile Thr Ser Val Arg Ser Arg Val Thr Asn Leu Thr Glu Leu Leu
166   180         185         190
168 Pro Gly Ile Thr His Glu Gln Val Cys Glu Ala Ile Thr Glu Ala Phe
169   195         200         205
171 Phe Ala His Tyr Gly Glu Arg Val Glu Ala Glu Ile Ile Ser Pro Asn
172   210         215         220
174 Lys Thr Pro Asp Leu Pro Asn Phe Ala Glu Thr Phe Ala Arg Gln Ser
175 225         230         235         240
177 Ser Trp Glu Trp Asn Phe Gly Gln Ala Pro Ala Phe Ser His Leu Leu
178   245         250         255
180 Asp Glu Arg Phe Thr Trp Gly Gly Val Glu Leu His Phe Asp Val Glu
181   260         265         270
183 Lys Gly His Ile Thr Arg Ala Gln Val Phe Thr Asp Ser Leu Asn Pro
184   275         280         285
186 Ala Pro Leu Glu Ala Leu Ala Gly Arg Leu Gln Gly Cys Leu Tyr Arg
187   290         295         300
189 Ala Asp Met Leu Gln Gln Glu Cys Glu Ala Leu Leu Val Asp Phe Pro
190 305         310         315         320
192 Glu Gln Glu Lys Glu Leu Arg Glu Leu Ser Ala Trp Met Ala Gly Ala
193   325         330         335
195 Val Arg
199 <210> SEQ ID NO: 3

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Input Set : A:\col0227se.APP
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200 <211> LENGTH: 30
201 <212> TYPE: DNA
202 <213> ORGANISM: Artificial Sequence
204 <220> FEATURE:
205 <223> OTHER INFORMATION: Description of Artificial Sequence: Oligonucleotid
206 lplA-fwd
208 <400> SEQUENCE: 3 30
209 cgggatccct atctgcgcct gacactcgac
212 <210> SEQ ID NO: 4
213 <211> LENGTH: 33
214 <212> TYPE: DNA
215 <213> ORGANISM: Artificial Sequence
217 <220> FEATURE:
218 <223> OTHER INFORMATION: Description of Artificial Sequence: Oligonucleotid
219 lplA-rev
221 <400> SEQUENCE: 4 33
222 cgggatcctt tatctgaacc gccatttgcg ctg

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/538,157

DATE: 06/22/2005

TIME: 10:07:46

Input Set : A:\c010227se.APP

Output Set: N:\CRF4\06222005\J538157.raw

L:7 M:283 W: Missing Blank Line separator, <130> field identifier

L:9 M:270 C: Current Application Number differs, Replaced Application Number

L:10 M:271 C: Current Filing Date differs, Replaced Current Filing Date